

CLAIMS

1. Backflow preventer (1), which can be inserted into a gas or liquid line (2), comprising a closing body (3) embodied as a hollow body open on a drainage side, which limits a passage channel (5) between the closing body and a central closing body counterpart (4), the closing body (3) being displaceable by a flow medium flowing through the passage channel (5) in a flow direction (Pf 1) from a closed position, contacting the closing body counterpart (4) in a sealing manner into an open position against a restoring force of an elasticity and/or a stability of the closing body, wherein the closing body (3), in an unstressed closed position, initially contacts only a partial or edge region (6) of the closing body counterpart (4) with a partial region embodied as a sealing lip (12) of the closing body and can additionally be pressed against the closing body counterpart (4) with a partial region of a longitudinal extension thereof under a pressure of the fluid flowing against the flow direction (Pf 1), opening a downstream buffer volume for back flowing fluid, and the closing body (3) is non-removably held on the backflow preventer in the gas or liquid line.

2. A backflow preventer according to claim 1, wherein a free edge region of the sealing lip (12), which contacts the closing body counterpart (4), is provided with an edge reinforcement (13) to compensate against expansion of an edge region circumference.

3. A backflow preventer according to claim 2, wherein the edge reinforcement (13) is embodied as an annular cross-sectional expansion or a cross-sectional enlargement of the closing body (3).

4. A backflow preventer according to claim 1, wherein the closing body counterpart (4) has a rounded end section (6) and is formed in a drop shaped manner.

5. A backflow preventer according to claim 1, wherein the central closing body counterpart (4) is connected to a through flow plate (7), which has openings (9) which open into the passage channel (5).

6. A backflow preventer according to claim 5, wherein the through flow plate (7) in an area of the passage channel (5) comprises a sieve or perforated plate with honeycomb-shaped openings (9).

7. A backflow preventer according to claim 5, wherein the through flow plate (7) and the closing body counterpart (4) are connected to one another in one piece.

8. A backflow preventer according to claim 5, wherein the closing body (3) is held at the exterior circumference of the through flow plate (7).

9. A backflow preventer according to claim 5, wherein the closing body (3) includes a closing body section held at the through flow plate (7) that contacts an interior circumference of the gas or liquid line (2) in a sealing manner.

10. A backflow preventer according to claim 9, wherein an upstream face edge region of the closing body (3), contacting the gas or liquid line (2) in a sealing manner, comprises an annular cross-sectional enlargement (10).

11. A backflow preventer according to claim 10, wherein the closing body (3) is held with the cross-sectional enlargement in a fastening groove (11) provided in an exterior circumference of the through flow plate (7).

12. A backflow preventer according to claim 5, wherein the backflow preventer (1) is formed in two pieces and comprises the closing body (3), on the one hand, and the closing body counterpart (4), on the other hand, with the through flow plate (7) connected thereto in one piece.